

REMARKS

Claims 1-19 are currently pending in the application. Claims 1-19 have been rejected. The response amends claims 1, 9, 13, and 17-19, leaving for Examiner's consideration claims 1-20. Reconsideration and withdrawal of the rejections set forth in the Office Action dated May 31, 2007 are respectfully requested.

Objection to Figure

The Examiner requested Fig. 2 be designated by a legend such as "Prior Art," because only that which is old is illustrated.

Fig. 2 has been amended to be in compliance with 37 CFR 1.121(d) with "replacement Sheet" labeled in page header. The Applicant respectfully requests that the objection with respect to Fig.2 be withdrawn.

Claim Rejections

35 USC §112 Rejections

Claims 13-16 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 13 has been amended to remove the phrases "at least one aspect of" and "when one or more criteria are met." Since claims 14-16 depend on claim 13, the Applicant respectfully request rejections with respect to claims 13-16 under 35 U.S.C. §112, second paragraph, be withdrawn

35 U.S.C. §102(e) Rejections

Claims 1-2, 5-6, 9 and 13-19 were rejected under 35 U.S.C. 102(e), as being anticipated by Feinstein (U.S. Patent No. 6,466,198 B1).

The Prior Art

Feinstein teaches "view navigation and magnification of the display of hand-held devices in response to the orientation changes **along only two axes of rotation** as measured by sensors inside the devices" (Abstract, emphasis added by the Applicant), where "**preset hand gestures** by the operator ... communicate special commands to the hand-held device" (col. 3, lines 38-41, emphasis added by the Applicant). In other words, Feinstein's approach responds only to pre-defined hand gestures measurable along only two axes of rotation, and any other movement will be filtered out as "orientation noises" (col. 8, lines 52-58). One major problem with such an approach in actual application is that it is un-natural, since unlike a machine or robot, a holder of the hand-held devices rarely moves his/her eyes and/or hands in discrete steps along only X and Y axes in Cartesian coordinates to resemble preset gestures.

The Prior Art Distinguished

To anticipate a claim, a prior art reference must teach each and every element of a claim. Independent claims 1, 9, 13, and 17-19 have been amended to include the language "wherein said motion follows a preferential motion arc that is natural to eye and/or hand coordination of holder of said portable electronic device." Feinstein does not teach hand motion along a motion arc that is natural to eye and/or hand coordination of the holder of the device. On the contrary, Feinstein limits hand motion to preset hand gestures along only two axes of rotation as discussed above. Consequently, claims 1, 9, 13, and 17-19 are allowable over prior art.

Since claims 2-8 depend on claim 1, claim 10-12 depend on claim 9, and claims 14-16 depend on claim 13, claims 1 – 20 cannot be anticipated by Feinstein under 35 U.S.C. 102(e) for at least this reason, and the Applicant

respectfully request rejections with respect to these claims under 35 U.S.C. 102(e) be withdrawn.

35 U.S.C. §103(a) Rejections

Claims 3-4, 7-8 and 10-12 were rejected under 35 U.S.C. 103(a), as being unpatentable over Feinstein in view of Walker (U.S. Patent No. 6,072,467).

The Prior Art

Walker teaches a "hand-held accelerometer-based computer control device utilized to control on-screen animated characters ... via a series of ... hand movement patterns for corresponding character control" (Abstract). "The accelerations provided by different hand gestures or movements may be identifiable through the utilization of templates which provide histograms of the patterns to be recognized" (col. 3, lines 44-48). In other words, like Feinstein, Walker pre-defines a series of templates of hand gestures and movements and matches a user's hand movements with such templates. If a pattern is recognized, the on-screen animated characters will move accordingly.

The examiner cited the pattern recognition method utilized in Walker on col. 9, lines 38-67 and col. 10, lines 1-15. The cited "K Nearest Neighbor Algorithm" compares "the data comes out as 128 numbers ... with the distance between all the previously stored samples as calculated in a 128 degree space. Here, the correlation is the Euclidean distance" (col. 9 lines 39-43), which is "defined as the square root of the sum of the squares root of the sum of the squares of the difference of each value: square root $((A1-B1)^2 + (A2-B2)^2 + \dots + (A128-B128)^2)$ " (col. 10, lines 7-9), i.e., distance along a straight line between point A and B. Hence, Walker measures the distance and moving direction along a straight line, not a natural arc or spherical path, between the current hand position and a targeted template (which represents where the hand is

supposed to be for a certain kind of character movement). Consequently, Walker also suffers the same un-natural problem as Feinstein, since moving to and/or recognizing pre-defined hand gestures/positions along straight lines does not fit with natural movements of a user's hand.

The Prior Art Distinguished

To render a claim obvious, the prior art, whether considered alone or in combination, must teach each and every element of the claim. Like Feinstein, Walker does not disclose hand motion that "follows preferential motion arc that is natural to eye and/or hand coordination of holder of said portable electronic device" as discussed above. Therefore, Feinstein in view of Walker cannot render independent claims 1 and 9 obvious. Since claims 3-4 and 7-8 depend on claim 1, and claims 10-12 depend on claim 12, claims 3-4, 7-8, and 10-12 cannot be rendered obvious over Feinstein in view of Walker under 35 U.S.C. 103(a) for at least this reason, and the Applicant respectfully request rejections with respect to these claims under 35 U.S.C. 103(a) be withdrawn.

CONCLUSION


In view of the foregoing amendment, the applicant submits that all claims pending in the application are allowed. A Notice of Allowance is therefore respectfully requested.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 838-4441.

Respectfully submitted,
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